



7 Reasons

Oil and Gas Uses Modified Shipping Containers



DURABLE CONEX
CONTAINERS
WITHSTAND TOUGH
ENVIRONMENTS



A MORE DURABLE CHOICE

U.S. crude oil production continues to climb at a steady pace – from 10.96 million barrels/day in 2018 to 12.8 million barrels/day in 2019. During the same period, natural gas production increased 10%, reaching an average of 111.5 billion cubic feet per day in 2019. ([U.S. Energy Information Administration](#))

Since many oil and gas companies operate in remote locales with limited infrastructure, finding mobile yet durable structures is a concern for operations managers.

The underlying construction of containers – high-grade steel – provides a superior solution for workforce housing and drilling storage units. Before you draft your next project or expand your operations, consider seven reasons why the oil and gas industry favors shipping containers.



CLIMATE-CONTROLLED STORAGE, WORKSPACE, & LOCKER ROOMS

Providing comfortable storage, workspace, workforce housing, and locker rooms are essential on oil and gas job sites. When working in the hot summers of Texas or the frigid winters of North Dakota, the climate puts morale at risk. In addition, many drilling sites require office buildings and storage units to accommodate temperature sensitive equipment and technology assets.

Insulated and temperature-controlled shipping containers keep personnel comfortable and key assets dry regardless of the temperature outside. For example, Phoenix Petrocorp uses climate controlled shipping containers to keep their mobile servers safe and cool. The Williams Companies use climate controlled shipping container locker rooms and bathrooms as a key part of their employee retention efforts.

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In an average year, at least 12 Texas cities experience more than 100 days of 90-degree temperatures or higher.

SNOW AND RAIN RESISTANCE

Gas and crude oil operators in North Dakota expect to encounter snow. Yet, much of today's oilfield housing is geared toward mobility – not snow loads or water resistance. Sure, some trailers may come equipped with steel siding panels, but that solution doesn't go far enough.

Shipping container roofs are rigorously tested. Every ISO-certified shipping container roof must be able to hold 660 lb. spread over two square feet at the roof's weakest point without deforming.

Designed to endure the extreme weather conditions of the open seas, steel shipping container units are water resistant. Falcon can also make modifications that maintain this water resistance to ensure the contents of your containers stay dry, even in rain storms and blizzards.



Kinder Morgan
uses containers
to protect their
equipment.

(Left)



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WIND RESISTANCE

A single, empty, 20-foot shipping container weighs approximately 5,050 lbs. empty. In most cases, the weight alone is enough to keep a modified shipping container on the ground in inclement weather.

Even so, if a work site is at risk for extreme winds, a steel plate or angle iron can be welded onto the corner castings of the container, and then bolted into the ground or concrete foundation. ISO testing ensures that the walls of the container will not crumple under wind loads.

The walls of both 20-foot and 40-foot ISO certified shipping containers are strong enough to withstand the force of wind gusts up to 180 miles per hour, a wind speed only seen in Category 5 hurricanes. Site managers can have peace of mind that container structures will weather windy conditions without damage.



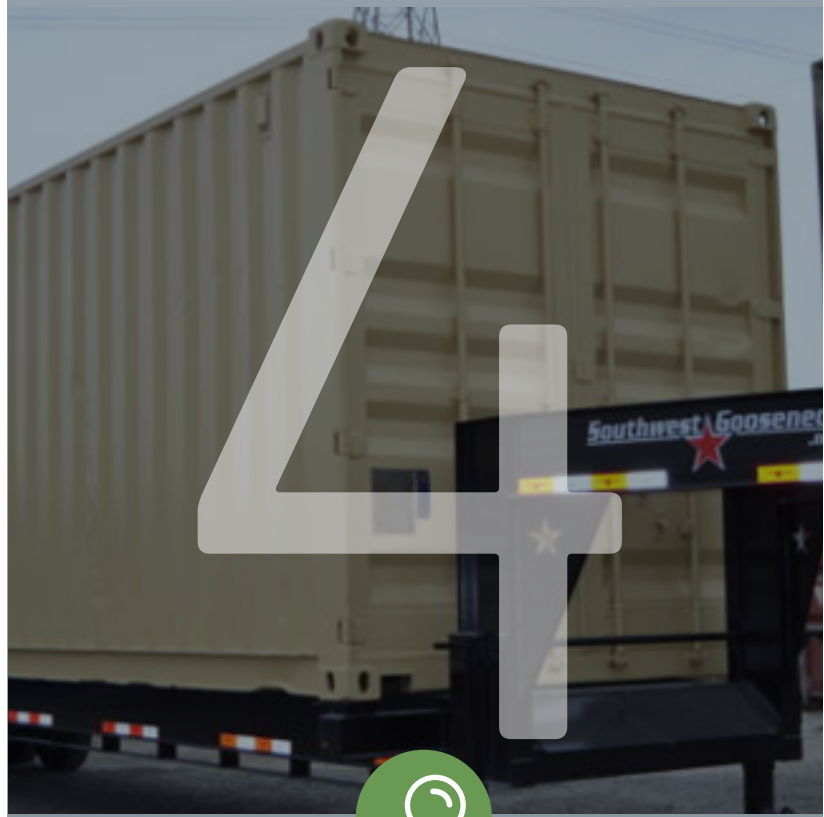
Above: A twist lock that can be bolted to a concrete pad and then used to secure a shipping container.

MOBILITY

Foundations are not always necessary for single-unit container structures. If there is no risk of serious winds, a container can simply be placed on flat, dry, and level ground. The minimal site-prep makes for faster deployment and reduced environmental impact.

Travel trailer users expect a certain amount of maintenance when they tow over rugged roads. Everything from window blinds to bolts tend to come loose—or even fall off. Modified containers are the more durable alternative for businesses that travel through less developed areas.

Falcon also carefully selects materials for the interior finish-out that will not crack or loosen on the road. Businesses can relocate containers again and again and spare themselves the maintenance and replacement costs of travel trailers.



Shipping containers are inherently easy to move around job sites thanks to three built-in features:

1. Standardized Sizing

ISO standardization ensures that shipping containers with simple modifications will fit perfectly onto flatbed trucks—no oversize permits required.

2. Forklift Pockets

A forklift can maneuver a shipping container to the ideal location thanks to the container's built-in pockets.

3. Durable Corner Castings

Cranes easily rig to the steel corner castings on shipping containers.



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TURN-KEY ELECTRICAL AND PLUMBING

The plug and play electrical and plumbing fittings on modified containers save businesses time, money, and hassle. Electrical fittings include interior and exterior lighting, electrical panels, mounting boards for network centers, 110V electrical outlets, and duplex Ethernet ports.

Shipping containers with bathrooms will arrive fully plumbed with a plumbing port. Falcon also provides an option for a direct-to-ground drain with typical 3/4-inch and 3-inch out pipes.

Project managers have enough on their plates without worrying about temperature control and plumbing in the field. When businesses use a modified shipping container retrofitted with plumbing and electrical, they reduce the time and costs associated with calling plumbers and electricians out to the field. As soon as a modified container arrives at the job site, the user can connect the structure to an external power or water source and begin use.



EQUIPMENT ENCLOSURES WITH CUSTOM UTILITY PORTS

High value equipment often needs to connect to the outside world while also staying secure within an enclosure that can resist the elements and theft. Falcon Structures designs and implements pass-through openings for shipping container equipment enclosures.

Predetermined equipment pass-through designs mean no guesswork during assembly and no delays due to fluctuating measurements. Consistent design also allows oil and gas companies to keep spare units on stand-by for speedy replacements.



Energy Transfer uses 317 10-foot shipping container enclosures for their pipeline RTUs.

FAST PRODUCTION AND DEPLOYMENT

At Falcon Structures, we understand that a smooth, reliable order process is important to every business. Since 2003, we've helped organizations discover how shipping containers can provide mobile storage, work space, living space, and equipment enclosure solutions.

Our years of experience and defined process ensure that customers are heard and stay informed from the initial design drawings to the final delivery. Armed with a deep understanding of each project's goals, challenges and deadlines, Falcon's team delivers a shipping container solution unique to your business' needs on time and on budget.



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Falcon Structures has
a 250,000 square-foot
production facility.





Have questions or need additional resources? [Let's talk.](#)

While the majority of our clients' container applications fall into one of our standard product categories, we regularly complete custom container modification requests too. If you're not finding the tools or insight you need here, contact us. We can walk you through the process and share additional resources to help transform your vision from concept into reality.

ABOUT FALCON STRUCTURES

When we repurpose steel shipping containers, we're not just leveraging a stronger, more readily available building material; we're creating long-lived business assets. Whether your business plans to quickly deploy a field camp or assemble a multi-story apartment complex, Falcon Structures can provide code-compliant modules for your project. Countless industries now rely on our modified containers to create modular container buildings with superior quality. Founded in 2003, Falcon Structures is based in Austin, Texas.

[Contact Falcon Structures](#) today for information on modified, steel shipping containers for your next project.



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